



Storrs Vineyard Hidden Springs Ranch

Stewardship Profiles in California Agriculture

Environmental Leadership with Habitat Restoration, Soil Health, Water Efficiency and Pest Management

In 2001, Central Coast winemakers Steve and Pamela Storrs purchased a 58-acre property in the lower Corralitos watershed of Santa Cruz County and planted their first grapevines in 2007. The Storrs estate vineyard (also known as Hidden Springs Ranch) produces organic wine grapes and specializes in pinot noir and chardonnay. The Storrs are committed to conservation and increasing biodiversity on their land while maintaining the productivity of cultivated areas. Next, the Storrs would like to pursue biodynamic certification.

PROBLEM

When the Storrs purchased the property, it was in a state of decline. The previously existing 42-acre Pippin apple orchard had left the soil depleted of nutrients and infested with nematodes. When the Storrs acquired Hidden Springs Ranch the apple trees were no longer producing fruit. The sandy, hydrophobic soil was washing away and they struggled to get organic matter back into the soil. The topsoil was also being destroyed by a rampant ground squirrel and gopher infestation. The Storrs observed that their neighbors' fence caused deer to use the roads and that they were being hit by cars on a daily basis. A 1930s-era drainage ditch on the property needed repairs.

SOLUTION IMPLEMENTED

It took seven years for the Storrs to prepare their land for the new vineyard operation. They eliminated the old orchard, removing the trees down to the roots, which was essential for addressing the nematode infestation. They brought in compost from a countywide composting program to improve the soil texture, structure, and condition while increasing soil organic matter. They also graded the land to encourage drainage to the middle of the vineyard, knowing that keeping water on the farm was important in order to recharge the aquifer. Cover crops between vine rows and native grasses and flowers serving as filter strips along ditches were established to curb erosion and protect water quality.

ACHIEVEMENTS

- Increased soil organic matter
- Increased water savings from catchment system
- Increased acreage under cover crop



“Hidden Springs Ranch represents as an economically viable model of environmental stewardship for vineyards”

-Pamela Storrs

To catch additional water to irrigate the vineyard, the Storrs installed a rain catchment system on the winery rooftop. Raptor perches and owl boxes attract predators such as red-tailed hawks that control gophers and ground squirrels. Introducing bat boxes for insect predation has been particularly important to managing codling moth at the ranch. To further support the presence of wildlife on their property the Storrs set up wildlife corridors and only placed fencing around the vineyards; the four fences help to keep deer away from the grapes while allowing bobcats and coyotes to come and go. Hedgerow plants were selected to provide food sources for deer and aesthetic beauty, although Ceanothus was avoided specifically to prevent Pierce's disease, which is common in Santa Cruz mountain vineyards. The diverse mix of vegetation also fosters beneficial insect habitat. Engineering services for repairing the drainage ditch came from the USDA Natural Resources Conservation Service (NRCS). Gophers Unlimited was hired to install cinch traps to manage the gopher population.

CHALLENGES/OBSTACLES OVERCOME

The process of stabilizing the soil involved a combination of cover cropping, leveling the land to control slope and planting native grasses. To help establish the grasses the Storrs opted to cover the plugs of grass with plywood when using the tractor. Through their exploration of biodynamic certification, the Storrs have found that microflora in the soil can impart different tastes to the grapes that can enhance a wine's minerality and flavor profile. It was not until the seventh year after they established the vineyard that they were happy with the quality of the grapes. The Storr's NRCS Environmental Quality Incentives Program (EQIP) contract required that the bat boxes and raptor perches be attached to a metal pole, which required making extra effort to find the proper hardware. They initially planned four raptor perches with NRCS, but ended up installing eight all together.

MEASURING SUCCESS

The Storr's vineyard soil organic matter is now two feet deep. They have planted 1,200 feet of native hedgerows planted, and harvest water from 60,000 square feet of vineyard rooftop. Twenty acres under cover crop and five acres are under permanent no-till cover crops.

For more information about the stewardship practices discussed in this profile, please contact the vineyard directly. You can reach Pamela Storrs by phone at (831) 458-5030 or by email to: pamelas@storrswine.com

STEWARDSHIP PRACTICES



Habitat Restoration



Soil Health



Water Efficiency



Pest Management



PROJECT PARTNERS

- California Wildlife Conservation Board
- Community Alliance with Family Farmers
- Hedgerows Unlimited
- Natural Resources Conservation Service
- Wild Farm Alliance

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